

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

INTELLECTUAL VENTURES II LLC,

Plaintiff,

V.

SPRINT SPECTRUM, L.P., NEXTEL
OPERATIONS, INC., ERICSSON INC.,
TELEFONAKTIEBOLAGET LM
ERICSSON, ALCATEL-LUCENT USA
INC.,

CIVIL ACTION NO. 2:17-CV-00662-JRG
(Lead Case)

T-MOBILE USA, INC., T-MOBILE US,
INC., ERICSSON INC.,
TELEFONAKTIEBOLAGET LM
ERICSSON,

CIVIL ACTION NO. 2:17-CV-00661-JRG
(Member Case)

Defendants.

ORDER AND OPINION ON DEFFENDANTS' MOTIONS TO DISMISS

Before the Court are Defendants’ Motions to Dismiss Under Rule 12(b)(6) (No. 2:17-cv-661-JRG, Dkt. No. 20; No. 2:17-cv-662-JRG, Dkt. No. 26) (“the Motions”), wherein Defendants assert that the Asserted Patents are directed to ineligible subject matter under 35 U.S.C. § 101. Having considered the Motions and for the following reasons, the Court finds that the Motions should be **GRANTED-IN-PART** and **DENIED-IN-PART**.

I. BACKGROUND

On September 21, 2017, Intellectual Ventures II LLC (“IV”) sued Sprint Spectrum, L.P. (d/b/a Sprint PCS) and Nextel Operations, Inc. (collectively, “Sprint”), Ericsson Inc. and Telefonaktiebolaget LM Ericsson (collectively, “Ericsson”), and Alcatel-Lucent USA Inc. for infringement of United States Patent Nos. 8,682,357 (“the ’357 Patent”), 8,897,828 (“the ’828 Patent”), 8,953,641 (“the ’641 Patent”), 9,320,018 (“the ’018 Patent”), 9,532,330 (“the ’330

Patent”), and 9,681,466 (“the ’466 Patent”). (*See* 2:17-cv-662, Dkt. No. 1.) Simultaneously, IV sued T-Mobile USA, Inc., T-Mobile US, Inc. (collectively, “T-Mobile”), Ericsson Inc., and Telefonaktiebolaget LM Ericsson for infringement of the same patents. (*See* 2:17-cv-661, Dkt. No. 1.)

On December 7, 2017, T-Mobile and Sprint filed the present identical motions to dismiss the ’357, ’828, ’018, ’330, and ’466 Patents as being directed to ineligible subject matter. (2:17-cv-661, Dkt. No. 20; 2:17-cv-662, Dkt. No. 26.)¹

II. LEGAL STANDARD

A. Rule 12(b)(6) Motion for Failure to State a Claim

To survive a Rule 12(b)(6) motion to dismiss, a plaintiff must plead enough facts “to state a claim to relief that is plausible on its face.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 547 (2007)). A claim is “plausible on its face” when the pleaded facts allow the court to “draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Iqbal*, 556 U.S. at 678.

A court must accept the complaint’s factual allegations as true and must “draw all reasonable inferences in the plaintiff’s favor.” *Lormand v. U.S. Unwired, Inc.*, 565 F.3d 228, 232 (5th Cir. 2009). However, the Court need not accept as true legal conclusions couched as factual allegations. *Iqbal*, 556 U.S. at 678. To be legally sufficient, the complaint must establish more than a “sheer possibility” that the plaintiff’s claims are true. *Id.* The complaint must contain enough factual allegations to raise a reasonable expectation that discovery will reveal evidence of each element of the plaintiffs’ claim. *Lormand*, 565 F.3d at 255–57. If it is apparent from the face of

¹ As the two motions are identical, all citations will be to the -662 motion.

the complaint that an insurmountable bar to relief exists, and the plaintiff is not entitled to relief, the court must dismiss the claim. *Jones v. Bock*, 549 U.S. 199, 215 (2007).

In considering a motion to dismiss for failure to state a claim, a court considers only “the complaint, any documents attached to the complaint, and any documents attached to the motion to dismiss that are central to the claim and referenced by the complaint.” *Lone Star Fund V (US), LP v. Barclays Bank PLC*, 594 F.3d 383, 387 (5th Cir. 2010) (citing *Collins v. Morgan Stanley Dean Witter*, 224 F.3d 496, 498 (5th Cir. 2000) (“In considering a motion to dismiss for failure to state a claim, a district court must limit itself to the contents of the pleadings, including attachments thereto. . . . We note approvingly, however, that various other circuits have specifically allowed that ‘documents that a defendant attaches to a motion to dismiss are considered part of the pleadings if they are referred to in the plaintiff’s complaint and are central to her claim.’”)).

B. Section 101: Patent Eligible Subject Matter

Anyone who “invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” may obtain a patent. 35 U.S.C. § 101. Because patent protection does not extend to claims that monopolize the “building blocks of human ingenuity,” claims directed to laws of nature, natural phenomena, and abstract ideas are not patent eligible. *Alice Corp. Pty. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). The Supreme Court instructs courts to distinguish between claims that claim patent ineligible subject matter and those that “integrate the building blocks into something more.” *Id.* First, the Court “determine[s] whether the claims at issue are directed to a patent-ineligible concept.” *Id.* at 2355. If so, the Court “consider[s] the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent eligible application.” *Id.* at 2355 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78–79 (2012)). However, the Court must be wary not to over generalize the invention, as “all

inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Id.* at 2354 (omission in original). The second step of the *Alice* test is satisfied when the claim limitations “involve more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (quoting *Alice*, 134 S. Ct. at 2359).

Recently, the Federal Circuit stated that “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact” that must be “proven by clear and convincing evidence.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). Something is not well-understood, routine, and conventional merely because it is disclosed in a prior art reference. *Exergen Corp. v. KAZ USA, Inc.*, No. 2016-2315, 2018 WL 1193529, at *4 (Fed. Cir. March 8, 2018). There are many obscure references that may qualify as prior art, but are insufficient to establish something is “well-understood, routine, and conventional activity previously engaged in by scientists who work in the field.” *Mayo*, 566 U.S. at 79.

III. DISCUSSION

A. Representativeness of the Claims

Defendants assert that Claim 26 of the ’330 Patent is representative of all claims of the ’330 and ’357 Patents, that Claim 6 of the ’466 Patent is representative of all claims of the ’018 and ’466 Patents, and that Claim 15 is representative of all claims of the ’828 Patent. Defendants make nearly identical arguments as to the representative nature of the exemplar claims, which arguments are contained within two footnotes in their briefing. For example, the entirety of Defendants’ argument that Claim 25 of the ’330 Patent is representative of the ’330 and ’357 Patents is:

2. IV's Complaint identifies Claims 1, 9, 18, and 26 of the '330 Patent and Claims 11, 30, and 47 of the '357 Patent. For purposes of this motion, Claim 26 of the '330 Patent is representative of all claims in those patents. Those claims contain analogous steps recited from the same or different network perspective as Claim 26. All of the claims are "substantially similar and linked to the same abstract idea" as representative Claim 26. *Content Extraction*, 776 F.3d at 1348.

...

7. Since Claim 26 is representative of all claims in the '330 and '357 Patents, all dependent claims in those patents fall with Claim 26. *Elec. Power*, 830 F.3d at 1352. Regardless, the dependent claims of the '330 Patent do not recite an inventive concept, because they recite (1) conventional activity using conventional information (Claims 27 and 34), (2) an environment in which the abstract idea is performed (Claims 28, 31, and 32), and (3) conventional information (Claims 29, 30, and 33). The dependent claims of the '357 Patent are not meaningfully different from those dependent claims and thus also fail to add an inventive concept.

(Dkt. No. 26 at 3 n.2, 11 n.7.)

Plaintiff responds that such conclusory statements "are not enough to meet Defendants' burden to establish that claim 26 is representative of *all* asserted claims for the abstract idea analysis." (Dkt. No. 61 at 7 (citing *Versata Software, Inc. v. NetBrain Technologies, Inc.*, No. 13-cv-676-LPS-CJB, 2015 WL 5768938, at *4 (D. Del. Sep. 30, 2015) ("[W]ith Defendants having given negligible attention to the remainder of the claims, the Court does not find it wise or appropriate to make a final determination as to the subject matter eligibility of such claims at this time."); *Perdiemco, LLC v. Industrack LLC*, No. 2:15-cv-727-JRG-RSP, 2016 U.S. Dist. LEXIS 135667, at *21–23 (E.D. Tex. Sept. 21, 2016)).) Plaintiff further asserts that the other asserted claims generally, and Claim 1 of the '330 Patent and Claims 11 and 30 of the '357 Patent specifically, recite "claim limitations that further define the inventiveness of the claimed subject matter." (*Id.* at 7.) Such improvements include, for example, "circuitry configured to receive, from a core network, a paging message," "a processor configured to send both a signal to indicate a page having an indication of a shared channel for the [user equipment] to receive and a transmission to the [user equipment] on the indicated shared channel" (as pertains to Claim 1 of the '330 Patent),

and “paging a user equipment (UE) in idle mode by sending a message having an allocation of resources for a shared channel and a radio network temporary identity (RNTI) associated with a plurality of UEs including the US and sending a paging message in the allocated resources for the shared channel” (as pertains to Claims 11 and 30 of the ’357 Patent). (*Id.* at 7–8 (cleaned up).)

Defendants reply that footnote 7 is sufficient to show that the claims are “substantially similar and linked to the same abstract idea,” and asserts that IV “does not argue for the patentability of other claims or present any meaningful argument for the ‘distinctive significance’ of its quoted limitations.” (Dkt. No. 65 at 4.)

The Court is mystified as to how Defendants could reasonably think that footnote 2 is sufficient to demonstrate that Claim 26 is representative of independent claims 1, 9, or 18, let alone the claims of an entirely different patent. While the Court notes (because Defendants failed to) that the ’330 Patent is a continuation of the ’357 Patent, Defendants make no argument that the ’357 constitutes the same invention as the ’330 patent.

Footnote 7 is no better. While Defendants present some superficial reasoning as to why each claim depending on Claim 26 is also patent-ineligible, such high-level, conclusory statements can hardly be considered “analysis.” As a result, the Court is left to conclude that Defendants have failed to show that Claim 26 is representative of any other claims of the ’330 and ’357 Patents, that Claim 6 is representative of any other claims of the ’018 and ’466 Patents, or that Claim 15 is representative of the ’828 Patent.

The Court next turns to an individual analysis of the patentability of these three designated claims.

B. Claim 26 of the ’357 Patent

Claim 26 recites:

26. A method performed by a user equipment (UE), the method comprising:

monitoring, by the UE in a long-term evolution (LTE) network, downlink transmissions for a signal to indicate a page from a network device, wherein the signal includes an indication of a shared channel and the signal is derived from a radio network temporary identifier (RNTI); and

receiving, by the UE, a transmission on the indicated shared channel.

'330 Patent at 12:56–65.

1. *Alice* Step One

Defendants argue that “Claim 26 recites two results-based steps of: ‘(1) monitoring for a signal that indicates a page from a network device, where the signal includes an indication of a channel and (2) receiving a transmission on the indicated channel.’” (Dkt. No. 26 at 4.) Defendants note that both the Federal Circuit and this Court have repeatedly found similar claims ineligible. (*Id.* (citing *Two-Way Media Ltd. v. Comcast Cable Commcn’s, LLC*, 874 F.3d 1329, 1334–38 (Fed. Cir. 2017) (finding no error in the district court’s holding that the claim recited the abstract idea of “(1) sending information . . . [and] (3) monitoring the receipt of the sent information.”); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351–54 (Fed. Cir. 2016) (holding abstract an eight-step method involving multiple “receiving” steps); *Orostream LLC v. ABS-CBN Int’l*, No. 2:15-cv-248-JRG, 2015 WL 5836949, at *1–3 (E.D. Tex. Oct. 1, 2015) (finding abstract a two-step method involving “monitoring length of time necessary for transfer of each target information packet” and “adjusting the rate of target information transfer in response to the monitored transfer time”); *Network Architecture Innovations LLC v. CC Network Inc.*, 2:16-cv-914-JRG, 2017 WL 1398276, at *2–4 (E.D. Tex. Apr. 18, 2017) (holding abstract claims involving receiving information, adding a bulletin to the received information, and transmitting the information and bulletin over a wide area computer network)).) Defendants further argue that the addition of “an indication of a shared channel” is a generic term that “provides no particular details about the indication.” (*Id.* at 5–6.)

IV responds that Defendants' analysis is erroneous for three reasons. First, IV asserts that Defendants ignored all parts of the claim that they asserted were conventional. However, IV claims that there are several relevant claim limitations: (1) "an indication of a shared channel"; (2) "the signal is derived from a radio network temporary identifier"; (3) "downlink transmissions"; (4) "a signal to indicate a page from a network device"; and (5) "the indicated shared channel." (Dkt. No. 61 at 9.) Second, IV asserts that Defendants "oversimplify their characterization of claim 26" to such an extent that Defendants' description was "untethered from the language of the claims." (*Id.*) Rather than being abstract, IV argues that Claim 26 "is drawn to patent-eligible subject matter" because "it entails an unconventional technological solution to a technological problem." (*Id.*) Finally, IV argues that Defendants' assertion that Claim 26 is merely a conventional paging procedure "incorrectly conflates the § 101 analysis with the §§ 102 and 103 analyses." (*Id.* at 10.)

The Federal Circuit has repeatedly held that collecting and sending information is an abstract idea. *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Basic levels of analysis, such as "people go through in their minds, or by mathematical algorithms, without more, [are] essentially mental processes within the abstract-idea category." *Id.* at 1354. Claim 26's monitoring of data and receiving data elements fall under these basic rules and are thus directed to abstract ideas. While IV attempts to save Claim 26 by limiting the type of data that the user equipment is monitoring or by limiting the receipt of the data to a certain channel, such limitations are insufficient to alter the basic fact that Claim 26 merely waits for and then receives data. This concept is abstract. Accordingly, the Court moves to consideration of *Alice* Step Two.

2. *Alice* Step Two

Defendants argue that Claim 26 fails to contain an inventive concept. Defendants assert that "Claim 26's recitation of 'monitoring . . . downlink transmission for a signal to indicate a page from a network device, wherein the signal includes an indication of a shared channel' amounts to

the abstract idea of monitoring for an indicator that includes instructions for receiving information” and that the additional elements “downlink transmissions,” “a signal to indicate a page,” and “an indication of a shared channel” “are a function of reciting the step in the context of a wireless environment.” (Dkt. No. 26 at 7–8, 8.) Defendants further argue that the specification describes conventional paging procedures “involving a UE first monitoring for a signal that includes an indication of a page message” and then receiving the message, while the addition in Claim 26 of “an indication of a shared channel” is merely generic information that “does not supply an inventive concept.” (*Id.* at 8, 9.) Finally, Defendants assert that the ordered combination of steps do not add an inventive concept. (*Id.* at 10–11.)

IV responds that Claim 26 survives *Alice* Step Two because it “is only applicable to wireless communication systems” and “solves at least two technical problems plaguing prior art paging methods: (1) the undesirable effects of frequency-selective channel fading and interference; and (2) the limited flexibility and capacity associated with a fixed allocation of resources.” (Dkt. No. 61 at 12–13.)² IV then asserts that “it will prove these matters at trial, and accordingly, there is a set of facts on which IV can prevail.” (*Id.* at 13–14.) Finally, IV asserts that filing a Rule 12 Motion to Dismiss on § 101 grounds “raises serious 7th Amendment issues” due to the inability of the parties to provide expert testimony or declarations. (*Id.* at 14.) IV goes on to state:

After submitting a factually and technically dense brief, the Defendants ask the Court to assume many factual assertions that are difficult to understand for a trained technical expert, let alone a district judge. The claims asserted here are not simple business method claims or the like, but contain real technical content. Defendants are free to present their case, but the Federal Rules of Civil Procedure do not contemplate resolving such complex factual matters on a motion to dismiss. There are no special rules for patent cases, and the procedural and constitutional

² The Court notes that IV asserts that such problems “arose when attempting to page handsets through prior art paging methods as discussed above.” (Dkt. No. 61 at 13.) However, IV’s discussion of the problems in the prior art fails to cite to a single section of the ’330 Patent. Instead, IV asserts that it “will establish each of these facts, and the others asserted in this brief, at trial.” (*Id.* at 6 n.2.)

protections afforded to litigants apply to this case, just like any others filed in federal court.

(*Id.* at 14–15.)

In considering a motion to dismiss for failure to state a claim, a court considers only “the complaint, any documents attached to the complaint, and any documents attached to the motion to dismiss that are central to the claim and referenced by the complaint.” *Lone Star Fund V (US), LP v. Barclays Bank PLC*, 594 F.3d 383, 387 (5th Cir. 2010). Here, the Court may consider the Complaint and the Patents, which Defendants attached to their motion to dismiss. (*See* Dkt. Nos. 1, 26.)

The “Background of the Invention” section of the specification of the ’330 Patent states:

In the conventional paging procedure, two signals are used to convey the paging message. The first paging signal is used to indicate whether a paging message is being transmitted to a particular UE or group of UEs. *The second paging signal carries the paging message(s) for the particular UE or group of UEs.* The second paging signal is transmitted following the first paging signal at a fixed time offset from the first paging signal.

The mobile terminal uses Discontinuous Reception (DRX) in sleep mode in order to reduce power consumption. When DRX is used, *the mobile terminal needs to monitor the first paging signal only at one paging occasion per DRX cycle.* The length of the DRX cycle is core network domain specific and may be updated locally in the mobile terminal using information given in system information from the core network.

’330 Patent at 2:5–21. Accordingly, the ’330 Patent asserts that it is well-known in the art that user equipment monitors network activity for a signal indicating a page from a network device. *Id.* at 2:16–17. Having received the first signal, the ’330 Patent then asserts that it is well-known that the user equipment will receive a transmission. *Id.* at 8–10.

IV must then rely on the nuances of Claim 26 to find some sort of inventive concept, such as the use of an “LTE” network, the use of a “shared channel,” or that the “signal is derived from a radio network temporary identifier.” However, the ’330 Patent does not portend to invent “LTE,”

nor does it assert invention of “shared channels” or “radio network temporary identifiers.” *See generally id.* Further, while IV contends that the ’330 Patent “solves at least two technical problems plaguing prior art paging methods: (1) the undesirable effects of frequency-selective channel fading and interference; and (2) the limited flexibility and capacity associated with a fixed allocation of resources,” neither the term “frequency-selective channel fading” nor any other problem in the prior art appears in the ’330 Patent specification. Despite drawing all reasonable inferences in the Plaintiff’s favor, the Court finds that Claim 26 does not contain an inventive concept under *Alice* Step Two and is therefore directed to patent-ineligible subject matter. Accordingly, the Court **GRANTS** the Motion as to Claim 26 of the ’330 Patent.

C. Claim 6 of the ’466 Patent

Claim 6 recites:

6. A method performed by a user equipment (UE), the method comprising:

receiving, from a network device, a first transmission including a first parameter corresponding to each of a plurality of channels and a second transmission including an allocation message for an uplink resource from the network device;

allocating, by a processor, resources in response to the allocation message, wherein resources are allocated for data of each channel having a second parameter above zero prior to another channel’s data for transmission having a third parameter less than or equal to zero; and

wherein the second parameter is derived from a first channel’s first parameter and the third parameter is derived from a second channel’s first parameter.

’466 Patent at 14:39–53.

1. Alice Step One

Defendants argue that Claim 6 is analogous to the claims the Federal Circuit found abstract in *Cyberfone*, *In re TLI Commc’ns*, and *Digitech*. *See CyberFone Sys., LLC v. CNN Interactive Group, Inc.*, 558 F. App’x. 988 (Fed. Cir. 2014); *In re TLI Commnc’s. LLC Patent Litig.*, 823 F.3d

607 (Fed. Cir. 2016); *Digitech Image Techs., LLC v. Elects. for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014). Specifically, Defendants assert that Claim 6 merely contains the concept of “ordering allocation of resources based on numeric rankings of parameters,” which “is akin to ‘collecting information in classified form, then separating and transmitting that information according to its classification’ found abstract in *Cyberfone*” and “almost identical to the concept of ‘organizing information through mathematical correlations’ found abstract in *Digitech*.” (Dkt. No. 26 at 13.) Defendants further argue that a human could mentally perform Claim six. (*Id.* at 15.)

IV first responds by noting that “[w]hile the process of determining what the invention as a whole is ‘directed to’ has confused the courts, plainly the claims at issue include far more than [Defendants’] ‘abstraction.’” (Dkt. No. 61 at 17.) IV instead proposes that the claims “are directed to a new uplink bandwidth allocation system and technique . . . [that] address[es] a particular problem in computer networking.” (*Id.*) IV notes that Defendants asserted “that the supposedly representative claim is ‘directed to’ a mathematical equation that numerically ranks parameters to order allocations.” (*Id.* at 18.) IV further notes that “no such equation is included in the claims” and that “the claim requires the use of physical devices” such as the user’s phone and the cellular network. (*Id.*)

In *In re TLI Commc’s*, the Federal Circuit stated that the “relevant inquiry at step one is ‘to ask whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea.’” 823 F.3d at 612 (quoting *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016)). After analyzing the claim at issue, the Federal Circuit held that “like the claims at issue in *Content Extraction* which were directed to ‘collecting data,’ ‘recognizing certain data within the collected data set,’ and ‘storing the recognized data in memory,’ 776 F.3d at 1347, attaching classification data, such as dates and times, to images for the purpose of storing

those images in an organized manner is a well-established ‘basic concept’ sufficient to fall under *Alice* step one.” *Id.* at 613. In so doing, the Federal Circuit noted that “the specification makes clear that the recited physical components merely provide a generic environment in which to carry out the abstract idea of classifying and storing digital images in an organized manner” and that the claim did not “attempt to solve a challenge particular to the Internet”; instead, the claim was “directed to the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem presented by combining the two.” *Id.* at 611, 613, 612. “Lastly, although the claims limit the abstract idea to a particular environment—a mobile telephone system—that does not make the claims any less abstract for the step 1 analysis.” *Id.* at 613.

Similarly, in *Cyberfone*, the Federal Circuit held that “using categories to organize, store, and transmit information is well-established. Here, the well-known concept of categorical data storage, *i.e.*, the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible.” 558 F. App’x at 992.

In this case, Claim 6 recites user equipment receiving a transmission for how to allocate data among multiple channels and then allocating the data. *See* ’466 Patent at 14:39–53. Such allocation is essentially nothing more than the recognition and organization of data. While the ’466 Patent may attempt to limit the claims to cellular networks, efficient transmission of data such that user quality of service degradation is minimized is an overarching concern to every type of data network, including local area networks, wireless communications, and the Internet; indeed, the Patent admits as much when it concludes the “Background of the Invention” by stating “[t]hus, there exists a need to provide an improved mechanism to differentiate between IP data flows.”

'466 Patent at 3:14–15. Accordingly, the Court concludes that Claim 6 is directed to an abstract concept under *Alice* Step One, and next turns to Step Two.

2. *Alice* Step Two

Defendants argue that Claim 6's recitation of generic computer components, such as a "processor" and "network device," does not supply an inventive concept. Defendants assert that such generic components "merely provide the environment in which the abstract idea is carried out," and as such have been found insufficient to save a claim. (Dkt. No. 26 at 17 (citing *Content Extraction*, 776 F.3d at 1348).) Defendants further argue that the "receiving" and "allocating" steps do not add inventive concepts on their own because they "involve[] basic computer function that is 'not even arguably inventive.'" (*Id.* (quoting *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014))).) Similarly, Defendants argue that the combination is not inventive because "an algorithm cannot be executed until it has its input values" and because Claim 6 merely "recites a conventional distribution of functionality." (*Id.* at 19.)

Unsurprisingly, IV responds that "Defendants fail to recognize the technological innovation of the '018 and '466 Patents." (Dkt. No. 61 at 20.) First, IV argues that the complexity of the technology means that this step cannot be resolved under *Alice* Step Two. IV next argues that Defendants failed to consider the claims as a whole, that "the allocation method is distinct from the prior art absolute prioritization and round robin techniques," and that Defendants "mistakenly focus on the act of receiving instead of on what is received, and on the details of how an allocation is done instead of on the important aspect that allocating at the phone instead of the eNodeB yields a significant advantage over prior art systems." (*Id.*)

Under Rule 12(b)(6), the Court is required to consider the pleadings, their attachments, and any attachments to the motion to dismiss that are referenced by the pleadings as true. *Collins*, 224 F.3d at 498. The '466 Patent states:

[T]he inventive concept of the present invention aims to provide at least one or more of the following features:

- (i) A method to provide prioritization of services across users in the DL;
- (ii) *A method to provide prioritization of services across users in the UL. This requires that weight values are signalled to the UE;*
- (iii) A method to limit the number of queues (i.e. services) to be allocated radio resources at any one time. This functionality is provided in the UL as well as the DL; and
- (iv) *The inventive concept of the present invention enables prioritization of packet types across users, as there is a single allocation process for each packet type and each user. This is particularly beneficial for packet-based, best-effort services. For instance, if a wireless communication system comprises a plurality of users that are performing very large file transfer protocol (FTP) downloads, and another user is web browsing, it is possible to prioritize the web browsing user over the others.*

'466 Patent at 12:28–49 (emphasis added). Defendants have furnished nothing to show such are not true. Accordingly, the Court must take as true that among the '466 Patent's inventive concepts is the concept of sending user equipment weighted values so that the data the user equipment wishes to upload is properly categorized and allocated. As such, the Court finds that receiving a transmission of such parameters and allocating the data in response to those parameters is an inventive concept under *Alice* Step Two. Such supplies a new solution to a heretofore unsolved problem in this field and is innovative to a level that survives the Step Two analysis. As a result, the Court concludes Claim 6 is not directed to patent ineligible subject matter and **DENIES** the Motion as to Claim 6 of the '466 Patent.

D. Claim 15 of the '828 Patent

Claim 15 recites:

15. A method performed by a wireless network, the method comprising:

sending, by the wireless network, an indication of whether accumulation of transmit power control (TPC) commands is enabled;

determining, by a user equipment (UE), a path loss of a downlink channel;

receiving, on a single physical channel by the UE if accumulation is enabled, an allocation of a scheduled uplink resource and a TPC command, wherein the TPC command is accumulated with other received TPC commands;

calculating, by the UE if accumulation is enabled, transmit power in association with an uplink communication based on both the path loss and the accumulated TPC commands; and

receiving, on the single physical channel by the UE if accumulation is not enabled, an allocation of a scheduled uplink resource to transmit data to the wireless network at a power level calculated by the UE based on the path loss

'828 Patent at 14:41–61.

1. *Alice* Step One

Defendants argue that Claim 15 is analogous to claims the Federal Circuit and Supreme Court have previously invalidated and as analogous to longstanding human behavior. (Dkt. No. 26 at 22–26.) Specifically, Defendants assert that Claim 15's determination of a path loss channel and calculation of the transmit power is similar to the claim in *Parker v. Flook*, wherein the Supreme Court held ineligible steps directed to a mathematical calculation, including “determining an updated alarm limit which is defined as $B_1 + K$; and thereafter adjusting said alarm limit to said updated alarm limit value.” 437 U.S. 584, 595 (1978) (“[I]f a claim is directed essentially to a method of calculating, using a mathematical formula, even if the solution is for a specific purpose, the claimed method is nonstatutory.”). Defendants further assert that the “concept of selecting between two algorithms based on an indicator in Claim 15 does not make the claim any less abstract,” because such selection is essentially “a basic decision-making task that humans and computers perform alike.” (Dkt. No. 26 at 24.) Finally, Defendants argue that “Claim 15 is analogous to behavior humans have used since the inception of communications” because “[h]umans have long determined how loudly they should project their own voice (whether in a

choir, when giving a speech, or in day-to-day conversation) based on feedback from a listener and/or their own judgment.” (*Id.* at 25.)

IV responds that Claim 15 “is drawn to a wireless communication method; not just a power control method as defendants imply,” as “[a]ll of the steps of claim 15 clearly require communication between a ‘network’ and a ‘UE [User Equipment].’” (Dkt. No. 61 at 23 (quoting ’828 Patent at 14:41–61) (emphasis in original).) IV notes that the advantage of the claimed method “is that it improves the quality of wireless communication by more efficiently compensating for path loss and interference effects.” (*Id.* at 24 (citing ’828 Patent at 11:43–12:54).)

The Federal Circuit has held that “specific technologic modifications to solve a problem or improve the functioning of a known system generally produce patent-eligible subject matter.” *Trading Techs. Int’l Inc. v. CQG, Inc.*, 675 F. App’x. 1001, 1004–05 (Fed. Cir. 2017). For example, claims “necessarily rooted in computer technology [that] overcome a problem specifically arising in the realm of computer networks” are patent eligible. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014). Similarly, process claims that use “a combined order of specific rules” to improve on existing technological processes are patent eligible. *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1315 (Fed. Cir. 2016) (holding that an algorithm to make digital faces more realistic was patent eligible).


The Court finds that Claim 15 is directed towards a technological solution to the technological problem of “balanc[ing] the conflicting goals of reducing errors in a received signal while also reducing interference imposed on signals received at other receivers.” ’828 Patent at 2:35–37. The ’828 Patent discusses this problem throughout the “Description of the Prior Art” when it discusses how a low power signal may result in a high rate of errors, resulting in “broken voice during voice calls, low throughput over data links, and glitches in displayed video signals.”

Id. at 1:27–30. On the other hand, a low error rate “may mean that a signal is transmitted with an excessive level of power and that user could be provided a higher data rate.” *Id.* at 1:32–35, 1:35–37 (“Alternatively, if the power level of a signal is sufficiently reduced, additional users may be serviced. If data rates are increased, a user may receive a higher level of service.”). Such error rates may be affected by environmental factors such as the user moving through “buildings, vehicles and hills,” or the additional of “other mobile radios or other base stations[, which] may increase interference in the radio link and thus reduce a received signal’s [signal to noise-plus-interference ratio].” *Id.* at 4:30, 32–34. Accordingly, the Court finds that Claim 15 of the ’828 Patent is directed to increasing the functionality of the wireless network, a problem that necessarily arises only in the realm of such networks, and is thus not directed to an abstract concept under *Alice* Step One. Therefore, the Court **DENIES** the Motion as to Claim 15 of the ’828 Patent.

IV. CONCLUSION

The Court finds that Claim 25 of the ’330 Patent is directed to an abstract concept under *Alice* Step One and does not contain an inventive concept under *Alice* Step Two. Accordingly, the Court **GRANTS** the Motion as to Claim 25 of the ’330 Patent. The Court further finds that a question of fact remains as to whether Claim 6 of the ’466 Patent contains an inventive concept under *Alice* Step Two and **DENIES** the Motion as to Claim 6. The Court finds that Claim 15 of the ’828 Patent is not directed to an abstract concept under *Alice* Step One and **DENIES** the Motion as to Claim 15. Further, the Court is not persuaded that these three specific claims are representative of the otherwise named claims as Defendants assert. Thus, the holding of this opinion that Claim 25 of the ’330 Patent is directed to ineligible subject matter does not impact or affect any of the other asserted claims herein, other than said Claim 25 in isolation.

So ORDERED and SIGNED this 24th day of September, 2018.



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE